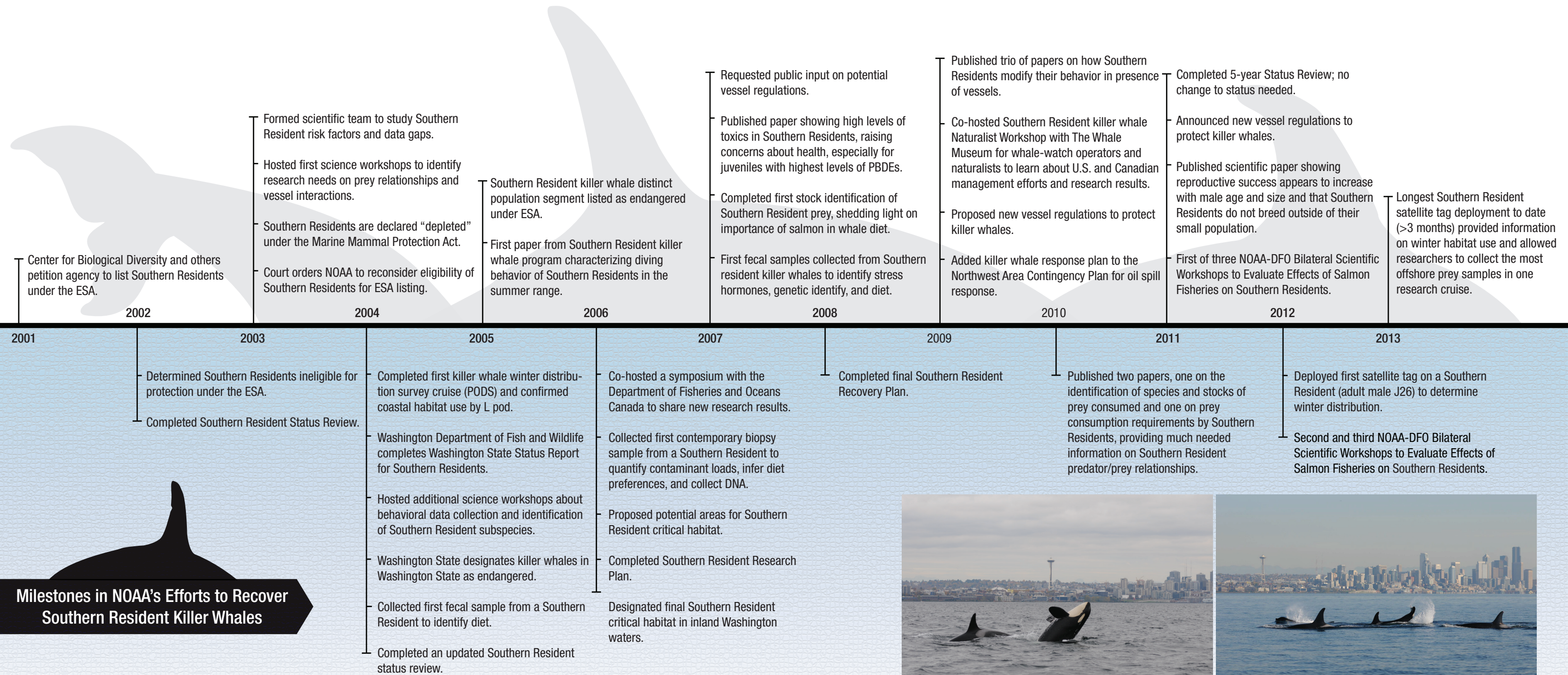


The full report: “Southern Resident Killer Whales: Ten Years of Research and Conservation,” is available at:

www.nwfsc.noaa.gov



Southern Resident Killer Whales: 10 Years of Research & Conservation Report Summary



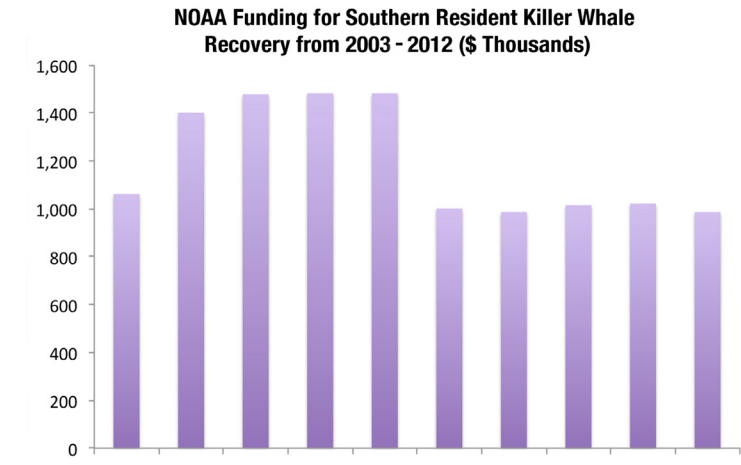
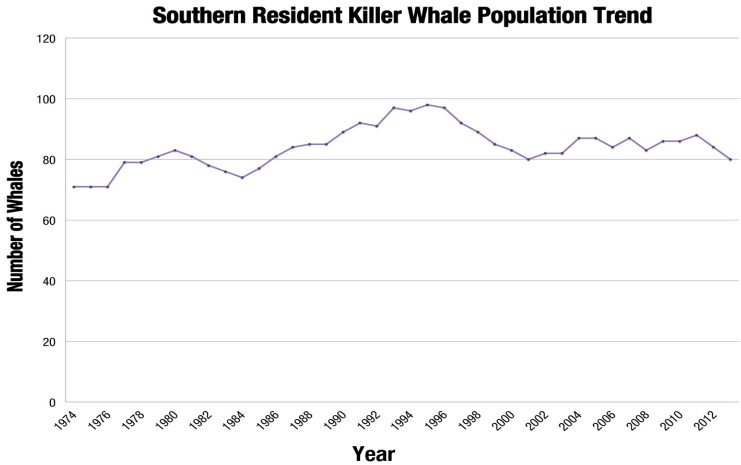
Milestones in NOAA’s Efforts to Recover
Southern Resident Killer Whales



Report Summary

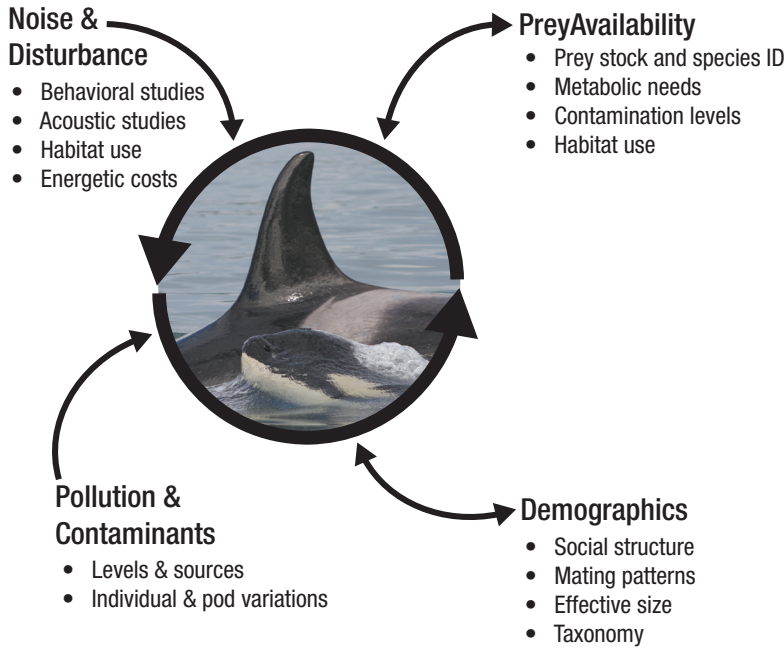
Introduction

In the early 2000s, citizens and researchers in Puget Sound were growing increasingly concerned about the health of the local killer whale population following a decline in the 1990s. Despite decades of earlier studies, we were still missing key information on the status and threats to this charismatic population. Do they get enough to eat? Does vessel traffic have an impact on their behavior? Where do they go in the winter? Do they suffer from disease? Answers to these questions were needed to understand what was limiting the population and to plan an effective recovery. In 2003, thanks to Congressional funding, NOAA Fisheries began a research and conservation program to better understand and protect these animals. A few years later, in 2005, the agency listed the population as endangered and finalized a recovery plan in 2008.



History of federal Southern Resident killer whale funding by year and activity. NOAA SRKW funds are those directed by Congress to be used for Southern Resident recovery.

Research to Support Killer Whale Recovery



Highlights of the First 10 Years

Thanks to the first 10 years of this program and collaborations with many partners, we now know:

Southern Residents favor Chinook salmon

Chinook salmon, also known as King salmon, make up a majority of their diet, especially in the summer when Chinook from the Fraser River in Canada are particularly important. Many runs of Chinook are endangered or threatened, potentially limiting their food source. Ensuring that salmon populations are healthy is an important part of recovery.

They are among the most contaminated marine mammals

Southern Resident killer whales have high levels of pollutants in comparison to other fish-eating killer whales, and levels are particularly high in young whales. Pollutants are a concern because they are known to cause disease and reproduction problems in marine mammals.

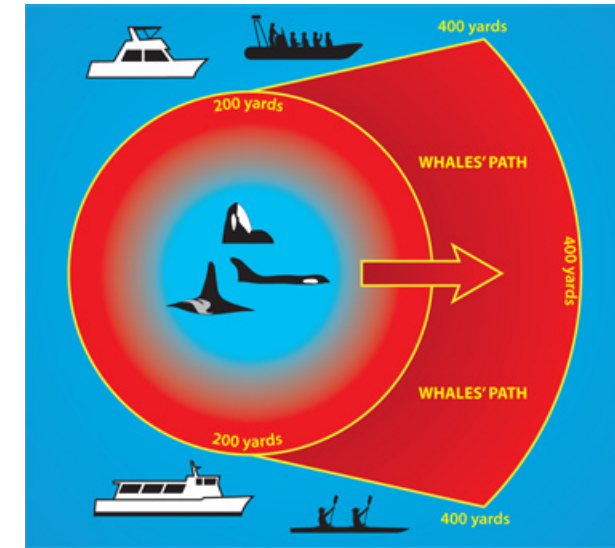
Movements of satellite-tagged Southern Resident killer whale K25 from 29 December 2012 to 3 April 2013. NWFSC/NOAA Fisheries.



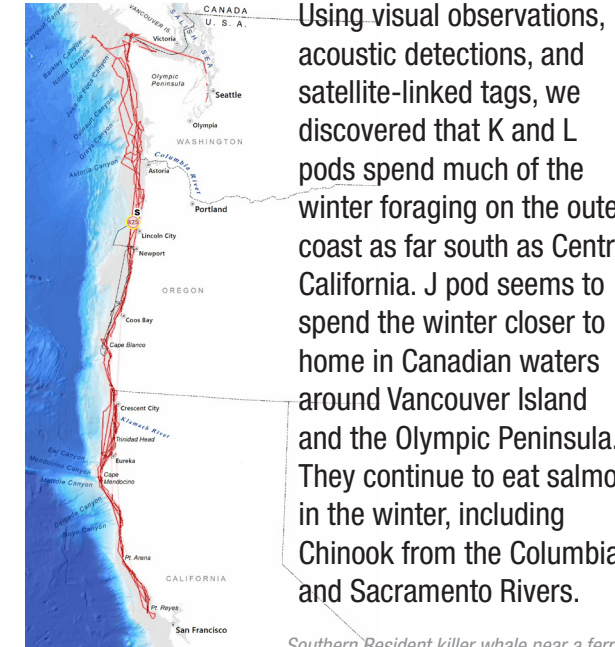
Southern Resident killer whale with salmon. NWFSC/NOAA Fisheries.

When vessels are present, they hunt less and travel and vocalize more

Southern Residents spend more time traveling and less time hunting when more vessels are present. This is true for all types of vessels, including kayaks. They also call louder and increase surface behaviors like breaches and tail slaps, which can be energetically costly. Based on this information, we implemented new vessel regulations to reduce behavior and noise impacts to the whales.



In the winter, they forage along the West Coast as far south as Central California



Southern Resident killer whale near a ferry in Puget Sound. NWFSC/NOAA Fisheries.

Education is an important part of recovery

Working with educational institutions in the region, we have taught thousands about the biology of the whales, the threats they face, and actions people can take to support their recovery.

Questions That Remain

We have come a long way in our ability to protect these animals, but many questions remain to guide effective recovery. Future support of this program will enable research and management into these areas:

- How large an effect do high contaminant loads have on whale health and reproduction?
- Do noise and vessels prevent whales from getting enough food?
- Are new vessel regulations successful in reducing impacts?
- Do the whales eat a more diverse diet on the outer coast compared to Puget Sound?
- What habitat is critical to the whales when they are on the outer coast, and what habitat threats do they face?
- How healthy are the animals and what conditions are likely to contribute to disease and mortality?
- How large a population can today's ecosystem support?

Looking Ahead

Ten years of federal effort and collaboration with the killer whale community has secured a strong foundation for recovering this special population, but there is still more work to do. The science team has advanced our knowledge about their biology and the threats they face. Targeted science-based recovery actions like new vessel regulations, oil spill recovery plans, and designation of critical habitat have secured important protections. Yet, to date, the population has not shown strong signs of recovery, likely in part because important factors are beyond our immediate control. We know recovery of these long-lived animals requires commitment and support over decades and across a large geographic area. For more details on the recovery program, please refer to the full report: "Southern Resident Killer Whales: Ten Years of Research and Conservation," available at:

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